MEMORANDUM

TO: Members, Clark Fork Basin Water Management Task Force (Task Force)
FROM: Gerald Mueller
SUBJECT: Summary of the November 20, 2006 Task Force Meeting
DATE: November 24, 2006

Participants

The following people participated in the Task Force meeting:

Task Force Members:

Marc M. Spratt	Flathead Conservation District/Flathead Chamber of Commerce
Holly Franz	PPL Montana
Jim Dinsmore	Granite Conservation District
Gayle Patton	Sanders County Commissioner
Elna Darrow	Flathead Basin Commission
Nate Hall	Avista
Fred Lurie	Blackfoot Challenge
Bill Slack	Lower Flathead

Ex Officio Member

Sen. Verdell Jackson

Staff:

Gerald Mueller	Consensus Associates

Public

Rep. Gary MacLaren	
Dr. David Shively	UM Dept. of Geography
Mike McLane	Montana Department of Fish, Wildlife and Parks

Meeting Agenda

- October 23, 2006 Meeting Summary
- Membership Update
- House Joint Resolution 3 Implementation Update
- Ground Water Conference Redux
- Hungry Horse Policy Paper
- FY 2008 - 2009 Budget
- USFS Compact
- Public Comment
- Next Meeting

September 11 Meeting Summary

The Task Force made no change to the October 23, 2006 meeting summary.

Membership Update

Gerald Mueller reported that he contacted Robin SteinKraus, Executive Director of the Flathead Lakers, and asked if her organization would be interested in being represented on the Task Force. She replied that she would discuss this with her board of directors at their next. Also, because of

Bill Slack's retirement, the Flathead Irrigation District Joint Board of Control has designated Steve Hughes to represent them on the Task Force. The Task Force still needs to find a representative to replace Jay Stuckey to represent the area of the Clark Fork River basin below the confluence of the Flathead and Clark Fork Rivers.

House Joint Resolution 3 Implementation Update

Gerald Mueller passed out a copy of an October 17, 2006 letter from Mary Sexton to Bill MacDonald. In the letter, Ms. Sexton ask the US Bureau of Reclamation (BOR) to estimate the cost of completing the Cost Reallocation Analysis for a contracted volumes of water from Hungry Horse of between 50,000 and 250,000 acre feet in 50,000 acre feet increments.

The Task Force discussed the meaning of 85-2-141(4) MCA, which states, "Water may be leased for any beneficial use. The amount of water that can be leased under this program for all beneficial uses may not exceed 50,000 acre-feet." The application of this statute to a potential state contract with BOR for Hungry Horse water is not clear. Does it mean that the state can lease only 50,000 acre feet in any one year or from any single federal reservoir? Does the 50,000 acre-feet limit apply only to the amount of water that the state leases to Montana water users, so that no limit exists on the amount of water for which the state could contract with the BOR for Hungry Horse water? Gerald Mueller was asked to seek answers of these questions when he meets next week with John Tubbs and DNRC Chief Legal Counsel Tim Hall.

The Task Force also acknowledged a need to support an appropriation to DNRC from the next legislature to conduct the BOR contracting procedure.

Ground Water Conference Redux

Technical Conference - At its last meeting, the Task Force agreed tentatively to pursue state legislation in the 2007 session that would:

- Set uniform reporting requirements for well log and pump test data;
- Require well drillers to record and report geophysical data;
- Require all groundwater data collected using public funds to be included in the Ground Water Information Center (GWIC) data base which is administered by the Montana Bureau of Mines and Geology (MBMG) ; and
- Fund a full-time GWIC editor FTE.

Mr. Mueller emailed the MBMG's Tom Patton asking for advice on specific statutory changes necessary to address these points. Mr. Patton responded with a paper that is included in Appendix 2 below. Mr. Patton said that MBMG could not help with the funding of the GWIC editor position. The Task Force discussed Mr. Patton's suggestions and agreed to them with one change. The new section in 85-2 addressing aquifer tests, subsection (3), would be changed to read, "The aquifer test report must be filed on a form specified by the department in consultation with the department of environmental quality, the bureau, and any other department with aquifer test requirements." Since Mr. Patton did not do so, Marc Spratt agreed to propose statutory language to require well drillers to provide geophysical-log data. Mr. Mueller was asked to try to obtain more information about the cost of a new GWIC position to edit the groundwater data base.

Policy Conference - Mr. Mueller passed out a copy of the registration list for the policy conference, which included 77 registrants. As a follow up to the conference, the Task Force decided to include in its work plan for next year developing an understanding of and suggested improvements to the coordination between subdivision review and water right administration.

Hungry Horse Policy Paper

Gerald Mueller passed out a copy of a draft policy paper entitled, "Hungry Horse Reservoir and Clark Fork River Basin Water Use," which he had previously circulated to the Task Force. See Appendix 3. Task Force members asked for the following changes to the paper.

- In the opening paragraph, add information about the economy of the Clark Fork River basin compared to the remainder of the state. This point would emphasize the need to find a source of water for future development.
- On page 2, in the first completed paragraph, delete the word "over" from the following phrase, "Avista's water rights, which total over 50,000 cfs..." Add to footnote 6 the fact that Avista's water right is capped at 50,000 cfs, although its three individual rights exceed this amount.
- On page 2, in the first sentence of the second paragraph, delete the word "lower" from the phrase, "PPL Montana owns hydopower rights at two lower basin dams..."
- Regarding the bullets on page three, it should be noted that because a senior right holder can choose which juniors to call, larger juniors would likely be at greater risk for a call because calling them would be more cost effective.
- Regarding these same bullets, the risk to juniors also stems from the 35,000 cfs 1951 Avista right at Noxon and the 11,120 cfs 1909 PPL Montana right at Thompson Falls.
- On page 3, add language to the paragraph preceding the heading, "Hungry Horse Dam and Reservoir" addressing the recent Montana Supreme Court decision in TU vs. DNRC concerning the connection between surface and groundwater.
- On page 4, in the first completed paragraph, change the third sentence to read, "While water reservations exist in the Yellowstone and Missouri River basins, they do not exist in the Clark Fork."
- On page 4, in the first completed paragraph, change the fifth sentence to read, "The state could then lease water to new or existing water users."
- On page 4, in the first completed paragraph, change the last sentence to read, "Thus by contracting for water stored in Hungry Horse, the state could provide new users with actual water rather than the most junior right valid only during 22 days in wet years."
- On page 5, change the last sentence of the paragraph under the heading, "Implications for Tribal Water Rights" to read, "To repeat, under Montana water law, a state contract for water stored in Hungry Horse reservoir and subsequently leased to basin water users could not and would not interfere with Tribal water rights."
- In the concluding paragraph on page 6, change the sixth sentence to read, "Such a contract is the most straight forward means to reserve for Montana's Clark Fork River basin water users."

FY 2008 - 2009 Budget

The Task Force reviewed the draft one page budget request modified by Mr. Mueller in response to comments at the October Task Force meeting. See Appendix 4. Except for adding the fact that the Task Force is the only body addressing water quantity issues for the Clark Fork River basin as a whole, the Task Force accepted the modified budget request. Mr. Mueller will discuss this request with John Tubbs.

USFS Compact

Gerald Mueller briefly reviewed the major provisions of the draft compact developed by the Reserved Water Rights Compact Commission and the United States Forest Service (USFS). These provisions include:

- USFS would not pursue a reserved water right for instream flows on USFS lands with a priority date coincident with the date of creation of each national forest.

- USFS would receive a reserved right for its consumptive uses generally associated with ranger stations, camp grounds, etc.
- In return for not pursuing instream reserved rights, USFS would be allowed to apply for instream flow water reservations through an expedited process. No others could apply for reservations in closed basins.
- As a part of the expedited process, USFS reservation applications would be deemed to be in the public interest unless evidence is supplied to the contrary.
- The amount of the instream flow reservation would be determined using the wetted perimeter technique used by DFWP. For streams with fish of special concern, the amount of the reservation would be determined from the wetted perimeter upper inflection point, which identifies an optimum amount of water for the fishery. For other streams, the instream flow amount would be determined by the wetted perimeter lower inflection point associated with survival flow levels.
- USFS would have standing to object to water rights claims in the adjudication process and water right change applications before DNRC.
- Before someone could apply for a water right or a change affecting USFS lands, they would have to obtain a special use permit from USFS.

Marc Spratt noted that the draft compact requires changes to Montana water law. One of the changes would give people with an interest in land affected by a proposed water right permit or change to object to the permit or change. Holly Franz stated that both the Montana Water Resources Association and the Montana Stockgrowers have objected to this provision. Mr. Spratt also gave examples of streams that flow through both USFS and private ground, the development of which could be limited by the proposed compact. He recommended that the Task Force take the position that while the state and USFS had made progress towards a compact, that the draft has not been considered enough to proceed with adoption at this time.

Task Force Action - The Task Force asked Mr. Spratt to draft a proposed comment letter to be sent to the Compact Commission and USFS by the November 27, 2006 comment deadline. Mr. Mueller will circulate the draft on Tuesday, November 21 for comments by Task Force members. If no adverse comments are received the letter will be sent.

Public Comment

There was no additional comment.

Next Meeting

The next meeting was scheduled for Monday, January 8, 2007 in Helena. The agenda will include:

- House Joint Resolution 3 implementation update
  - State - BOR negotiation
  - Water marketing statutes
  - Hungry Horse paper
- Groundwater data legislation
- Pending 2007 water legislation
- Discussion of possible Task Force position on the USFS Compact
- Task Force 2008-2009 work plan and budget

Appendix 2

Clark Fork Task Force: Legislative ideas.

1. Set uniform reporting requirements for well log and pump test data.
2. Require all groundwater data collected using public funds to be included in GWIC.
3. Fund a full-time GWIC editor FTE.
4. Geophysical data.

Comments:
I think that current statute is adequate to require that well log data be uniformly reported to the bureau. The form is reasonably comprehensive and specifies most of the information that reasonably could be required from a water well driller. Most of the issues regarding the log's satisfactory completion are the responsibility of the Board of Water-Well Contractors. Perhaps beefing up their training, education, and enforcement requirements in statute or rule might be one way to get better quality of information on the well log.

Drillers will argue that the log is nothing more than a "construction report" from them to the well owner that describes what the contractor did to construct a well. Any work (aquifer tests, geophysical logs, water-quality information, etc.) beyond that required to provide a properly constructed and operating well to the owner is excessive and should not be the responsibility of the well owner or driller. If additional data are desired by the government or any other party, the work to produce the data should be paid for by that person or entity.

Montana statute does not entirely adhere to this limited view of the well log and has not for decades. Montana (and all other states) has recognized that the information on the log is not only important to the well owner but is also collectively important for the management of ground water. Therefore, Montana has long required that a copy of the "construction report" (log) be filed with the state.

Because at the state level the report is no longer within the "driller-customer" context, the location of the well is also required on the log so that others may be able to use the log's information. For example, the state may need data to understand and manage ground water and without a location, the information on a log is useless. There has been a long discussion between the state and well drillers regarding who (the well owner or the driller) is responsible for providing the well's location. Unfortunately, because the well owner often does not know how to determine the location of the well and the driller is relying on the land owner for the information, too many well logs are filed with poor or even totally incorrect location information. Modern tools such as the portable GPS have improved the ability to determine well locations, but have also increased the risk that transposed numbers may provide a totally unusable location. If there is no secondary way to determine the location on the well log, the information on the log is unusable anyone but the original owner. Without location information, the report is not even useful to subsequent well owners if the log fails to be transferred to the new owner at the time land is sold. Because wells can last for decades and ownership may change frequently, well owners may lose their well log or never receive a log for the well on their newly purchased property. That this is an issue is shown by the 20-25 percent of GWIC customers who are land owners or real estate agents attempting to locate a well log.

Specifics:
1. Set uniform reporting requirements for well log data;

The requirement that drillers uniformly file the well log (and its contained information) with the Montana Bureau of Mines and Geology is adequately spelled out in statute in:

> 85-2-516. Well logs. (1) Within 60 days after any well is completed, the driller shall file with the bureau a well log report.
>
> (2) Except as provided in subsection (3), the well log report must be filed on a **form** specified by the department in consultation with the board of water well contractors provided for in 2-15-3307 and the bureau.
>
> (3) The bureau may allow submission of the well log report in an electronic format that is in accordance with the form specified as provided in subsection (2).
>
> (4) The bureau may return the report for refiling if it is incomplete or incorrect.

The **form** contains the content defined by the department (DNRC in this case) in consultation with the board of water well contractors and the bureau (MBMG in this case). The requirement that the three groups together define the content of the log helps preserve the balance between what the driller may see as a "construction report" and what the state sees as information needed to manage ground water. It is probably best left to the parties named to define the detail of the log (so that changes to the content can be made without needing to change statute) rather than to specify content in statute. However, because the well location is so important to the eventual use of the log, it may be beneficial to consider adding a location requirement to statute. For example, 85-2-516 could be amended to read:

> 85-2-516. Well logs. (1) Within 60 days after any well is completed, the driller shall file with the bureau a well log report.
>
> (2) Except as provided in subsection (3), the well log report must be filed on a form specified by the department in consultation with the board of water well contractors provided for in 2-15-3307 and the bureau. <u>The driller must provide a location for the well using at least two methods as specified on the form.</u>
>
> (3) The bureau may allow submission of the well log report in an electronic format that is in accordance with the form specified as provided in subsection (2).
>
> (4) The bureau may return the report for refiling if it is incomplete or incorrect.

Currently, the well log allows specifying the well location through township, range, and section; latitude and longitude; and the address where the well is located. Describing the well's location in more than one way allows well owners and other data users to confirm the location via each method. For example, an incorrect latitude and longitude (typographical error, mis-reading of GPS instrument, etc.) that has no corroborating well address or township, range, and section, results in a well log that can not be used by anyone. Including the location requirement in statute would also end any debate that the driller is not responsible for providing a location on the well log.

2. Set uniform reporting requirements for aquifer test data;

There is no requirement to file aquifer test data with the state other than as required by agencies such as DNRC or DEQ to provide data necessary to evaluate site-specific requests for water rights permits, or subdivision approval, or other regulatory process. Although aquifer test data is often required by these agencies, and if so requested becomes public information, the current handling of the data ties it directly to the regulatory process and becomes virtually **un-findable** once the decision or regulatory process is completed.

The logic that well log reports have value beyond their specific purpose (construction report to well owner from well driller) also applies to the production of aquifer test reports by consulting engineers

and scientists for site-specific water right or subdivision issues. If the aquifer test data were available through a single database (the Ground-Water Information Center – GWIC) along with associated water-well-log, water-quality, and water-level data, the state would be much better served. For example, an aquifer test for a water rights evaluation at one location may also be valuable for subdivision evaluations at nearby locations. Having these data together and available from one source would not only aid the state in its evaluation of ground-water management issues, it would also be valuable to those seeking new or changed ground-water rights. Potentially, if the aquifer test data required by the state were easily available, other nearby applicants could use the data for their own projects, limiting the cost to the public to acquire new data at locations where suitable data already exist. Evaluating the cumulative effects of wells in a basin would eventually be much more possible if all of the aquifer test data could be easily recovered and considered together.

If proposed changes to water-rights law in closed basins to require hydrologic reports and augmentation plans are adopted, the collection of aquifer test data will increase greatly. Every water-rights proposal will need an aquifer test to support its quantified stream depletion impacts. The amount and timing of stream depletion based on the proposal and the hydrogeology of the location would determine the scope of the accompanying augmentation plan.

Aquifer test data generated by consulting engineers and scientists that are required as a part of a state permitting process (water rights application, subdivision application, others?) should be treated logically in the same way well log data are and filed by the state in a central location from which they can be retrieved and used. Therefore, the Clark Fork Task Force could propose a new section in Chapter 85, section 2 similar to that below.

> NEW SECTION. Aquifer tests. (1) Aquifer tests required by a state agency for any **decision making process*** must be forwarded by the agency to the bureau.
>
> (2) Except as provided in subsection (3), the aquifer test report must be filed on a form specified by the department in consultation with the department of environmental quality and the bureau.
>
> (3) The bureau may allow submission of an aquifer test report in an electronic format that is in accordance with the form specified as provided in subsection (2).

decision making process* (water rights, application, subdivision proposal, facility siting, etc.)

State agencies would require two copies of the aquifer test from the applicant. The agency would forward the data to the bureau upon receipt.

A definition of an aquifer test may be required (although none is required for a well log). If so—one could be added to the definitions in 85-2-501.

> 85-2-501. Definitions. Unless the context requires otherwise, in this part the following definitions apply:
>
> (1) "Aquifer" means any underground geological structure or formation which is capable of yielding water or is capable of recharge.
>
> (2) "Bureau" means the Montana state bureau of mines and geology provided for in 20-25-211.
>
> (3) "Ground water" means any water that is beneath the ground surface.
>
> (4) "Ground water area" means an area which, as nearly as known facts permit, may be designated so as to enclose a single and distinct body of ground water, which shall be described horizontally by surface description in all cases and which may be limited vertically by describing known geological formations should conditions dictate this to be desirable.

(5) "Aquifer test" means measuring the observed change in water level in an aquifer to pumping a well with the goal of calculating the aquifer's hydrologic characteristics.

If the task force desires that all publicly required data are transferred to MBMG in addition to aquifer tests and well logs, it could propose a new section in Chapter 85 Section 2 similar to below.

NEW SECTION. Groundwater data. (1) Groundwater data or reports required by a state agency for any **decision making process*** must be forwarded by the agency to the bureau.
(1) The bureau may allow submission of groundwater data or reports in electronic formats.

decision making process* (water rights, application, subdivision proposal, facility siting, etc.)

If the generic groundwater data section should be adopted, a definition for "groundwater data" would likely be necessary in 85-2-501.

(5) "Groundwater data" means water-level, water-quality, geophysical-log, aquifer-test or other groundwater data.

3. Fund a full-time GWIC FTE.
Should the legislature decide to change statute to require transfer of additional ground-water data to MBMG, it is obvious that processing the new data will require additional funding at the Ground-Water Information Center. Currently the Information Center is funded from RIT sources but MBMG has no opinion on where the Task Force might propose to obtain additional funding.

4. Geophysical data.

Water well drillers would consider a requirement for geophysical-log data as something beyond that necessary to provide a well to a customer. They would consider it something that could be provided should someone decide to purchase it, and that most well owners would not desire the data. That being said, geophysical log data could be required by the state as part of the permitting/decision making process. In that situation the cost of the information would be born by the applicant requesting new water rights, subdivision, or other decision. Geophysical logs would be covered in the proposed ground-water data section of Chapter 85 section 2. GWIC would need to make provisions in its data structures to handle geophysical log data but the necessary changes could be easily made.

Appendix 3
Hungry Horse Reservoir and Clark Fork River Basin Water Use

Prepared by the Clark Fork River Basin Task Force[1]

November 2006

When it leaves Montana and crosses into Idaho, the Clark Fork River is the state's largest river.[2] One might think therefore that water availability is not an issue in the Clark Fork basin. Unfortunately, this is not the case. Portions of the basin such as much of the upper Clark Fork above Missoula and the Bitterroot are used to water scarcity.[3] But from a water rights perspective, the availability of water for new uses is questionable in the basin as a whole, and many uses based on water rights developed in the last 50 years may be at risk to calls by senior water right holders. Clark Fork population levels are growing rapidly and are projected to increase from about 320,000 in 2000 to 350,000 by 2010.[4] Growth is likely to continue after 2010. As this paper will discuss, the Clark Fork River Basin Task Force has concluded that water now stored in Hungry Horse Reservoir can provide for both new basin uses and provide security for many existing water users. How Hungry Horse water is managed is critical to the basin's future.

Water Rights

According to Montana's Constitution, "All surface, underground, flood, and atmospheric waters within the boundaries of the state are the property of the state for the use of its people and are subject to appropriation for beneficial uses as provided by law."[5] The state appropriates water for beneficial uses through the "first-in-time, first-in-right" allocation system in which water is allocated based on the order in which it was first put to a beneficial use. A person with the senior, i.e. earliest, water right is entitled to use all of the water from a water body until her or his water right is filled. The senior right holder need not share water when the supply is short and can issue a call on junior users requiring them to stop diverting water. Prior to 1973, a water right was obtained simply by diverting water and putting it to a beneficial use. No action by state government was required. Since the passage of the 1973 Water Use Act, obtaining a water right requires a permit from the Montana Department of Natural Resources and Conservation (DNRC). Because pre-1973 water rights were often not recorded, the state is currently engaged in a statewide water rights adjudication in the Montana Water Court to determine and record all water rights in a central state data base. When the adjudication is complete, all Clark Fork basin water rights will be combined into one final water rights decree.

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[1]The Clark Fork Task Force was created in August 2001 pursuant to 85-2-350 MCA. Its members are appointed by the DNRC Director to ensure balanced representation of the basin's watershed and water interests. The statute directed the Task Force to prepare a water management plan for the Clark Fork River basin that: (1) identified options to protect the security of water rights; (2) provided for the orderly development of water; and (3) provided for the conservation of water in the future. The water management plan was submitted to the Legislature and the Governor in September 2004. Most of its recommendations were adopted into the State Water Plan. The Task Force's continuing mandate includes " ...prepar(ing) proposed amendments to the state water plan provided for under 85-1-203 related to the Clark Fork River basin..." and "...identify(ing) short-term and long-term water management issues and problems and alternatives for resolving any issues or problems identified." See 85-2-350 (1) and (3)(a).

[2]The average annual discharge at the border of the Clark Fork River is just over 15 million acre feet, compared to XXX cfs for the Missouri River and YYY cfs for the Yellowstone River.

[3]Both the upper Clark and Bitterroot basins are closed to the issuance of most new surface water rights. See 85-2-336 and 85-2-344, repectively.

[4]See Appendix 3, The Changing Economy of Montana's Clark Fork Basin by Dr. Larry Swanson in the *Clark Fork Basin Watershed Management Plan*, September 2004.

[5]Article IX, Section 3(3)

The last water rights on the Clark Fork River just before the river exits Montana are owned by Avista Corporation. Avista owns three hydropower rights at its Noxon Rapids Dam with 1951, 1959, and 1974 priority dates.[6] The 1951 and 1959 rights were confirmed in an August 27, 1986 decree issued by Montana Water Judge Holter. The 1986 decree is subject to an additional objection period before the issuance of a final decree by the Montana Water Court. Avista obtained its 1974 rights through the DNRC permit required by Water Use Act. Avista's water rights, which total over 50,000 cfs, are sufficient to utilize almost all of the flows leaving the basin. Clark Fork River flows greater than 50,000 cfs occur only 6-8% of the time over the entire 90 year period of record. Flows greater than 50,000 cfs generally occur 22 days in May and June of wetter years. This suggests that surface water, and groundwater connected to surface water, is legally available for future appropriation in the basin only during the period when Avista's water rights are filled. Also, as of 1998, Montana water right records indicated that 7,805 (30%) of the 26,274 surface water uses in the Clark Fork River basin are junior to the earliest (1951) water right at Noxon Rapids Dam. Some 3,125 (12%) uses are junior to the latest (1974) Noxon Rapids water right. The uses with junior rights include 2,518 (32%) municipal, domestic, and other in-city uses, and 1,268 (16%) stock water uses. These junior rights potentially subject to a water rights call whenever Avista's rights are not filled.

PPL Montana owns hydropower rights at two lower basin dams, Kerr and Thompson Falls. These rights also pose constraints on new and existing water uses, albeit less than the Avista rights. PPL Montana owns two water rights for the production of hydroelectricity at Kerr Dam on the Flathead River. One right is for the amount of water necessary to fill the storage reservoir at any time. The second right is based on the dam turbine capacity and is for 14,540 cfs for power generation. The priority date for both water rights is April 3, 1920. These rights have not yet been adjudicated by the Montana Water Court. According to flow records, PPL Montana's rights at Kerr are filled only during the high-flow periods of high spring runoff. In 5 of 30 years, the Kerr rights are not filled at any time. In 11 of 30 years, the Kerr rights are filled 32 days or less. On average, the Kerr rights are filled only 56 days per year. At the Thompson Falls Dam, PPL Montana owns eight water rights for the production of hydroelectricity, three for storage and five for flows through the dam turbines.[7] The five flow through rights have priority dates in the years 1905, 1906, 1909, and 1992. The 1905, 1906, and 1909 rights were confirmed by an order issued by Judge Holter on October 20, 1986. A permit for the 1992 right was issued by DNRC pursuant to the Montana Water Use Act. According to flow records, prior to 1972, PPL Montana's water rights at Thompson Falls were generally satisfied throughout most of the irrigation season except during portions of August and September. Based on the 21 year period

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[6]The amounts and priority dates of Avista's three rights are: 35,000 cfs with a priority date of February 20, 1951; 5,400 cfs with a priority date of April 3, 1959; and 15,000 cfs with a priority date of November 19, 1974.

[7]Three of the rights, 76N-W-094415-00, 76N-W-211941-00, and 76N-W-211942-00, are for storage and can be used to draft and refill the reservoir for the purpose of providing daily shaping of power in response to demand. Details about the other five rights as as follows:

Water Right #	Flow Rate	Priority Date
76N-W-094414-00	1,250 cfs	March 31, 1905
76N-W-211938-00	2,000 cfs	January 29, 1906
76N-W-211939-00	5,000 cfs	December 3, 1906
76N-W-211940-00	2,870 cfs	June 29, 1909
76N-P-081517-00	12,300 cfs	May 13, 1992

from 1971 through 1991, PPL Montana's water rights at Thompson Falls were filled on average 294 days per year. After 1992, PPL Montana's rights have been satisfied only during the high flow periods of spring runoff. From 1993 through 2000, PPL Montana's rights at Thompson Falls were filled on average 93 days per year.

In summary, the Avista and PPL Montana hydropower rights pose the following constraints to basin water use:

- Except during periods of high spring runoff (57 days per year on average), water is not likely to be available for appropriation in the Flathead River basin above Kerr Dam, and any appropriation with a priority date junior to April 3, 1920, is potentially subject to a call by PPL Montana.
- Except during periods of high spring runoff (93 days per year on average), water is not likely to be available for appropriation in the Clark Fork River basin above Thompson Falls Dam, and any appropriation with a priority date junior to May 13, 1992, is potentially subject to a call by PPL Montana.
- Except during the 22 days during May and June in 3 years out of 10, water is not likely to be available for appropriation in the Clark Fork River basin, and any appropriation with a priority date junior to November 19, 1974, is potentially subject to a call by Avista.

The concern about the limited availability of water for new water rights was recently reinforced by a proposal for a decision issued by a DNRC hearings examiner in a surface water right permit application filed by Thompson River Lumber Company of Montana, Inc. (TRLC).[8] TRLC sought a permit to appropriate 250 gallons per minute (gpm), or 0.56 cfs, up to 400 acre-feet of water per year from the Clark Fork River approximately 40 miles upstream of the Noxon Rapids Dam. The hearings examiner proposed denying the permit because TRLC "...has not proven that water can reasonably be considered legally available. Applicant has proven that water is only available at times the flows at Noxon Rapids Dam exceed 50,000 cfs." This same logic could apparently be applied to any permit application upstream of Noxon Rapids Dam, virtually closing the Clark Fork basin to new surface water rights as well as groundwater rights when the groundwater is connected to surface water.

Hungry Horse Dam and Reservoir

Hungry Horse Reservoir, located near the top of the basin on the South Fork of the Flathead basin, was constructed and is operated by United States Bureau of Reclamation (BOR) "(f)or the purpose of irrigation and reclamation of arid lands, for controlling flood, improving navigation, regulating the flow of the South Fork of the Flathead River, for the generation of electric energy and for other beneficial uses primarily in the State of Montana, but also for downstream uses." In its water rights filing with the Montana Water Court, USBR claimed 3.5 million acre-feet of storage for future sales. The priority date of BOR Hungry Horse right is June 16, 1947, earlier than the Avista rights.[9]

Hungry Horse and Future Basin Water Availability

Montana law allows public entities to set aside water for future use only through water reservations. Private entities cannot reserve water for future use. While reservations exist in the Yellowstone and Missouri basins, they do not exist in the Clark Fork. Hungry Horse could provide a source for future

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[8]Proposal for Decision Application No. 76N 30010429 By Thompson River Lumber Company, March 30, 2006, Charles F. Brasen, DNRC Hearing Examiner.

[9]Water Right Number: 76J 134912-00 Statement of Claim

basin water development if the state would contract for a block of water now stored in the reservoir. The state could then lease water to new water users. Leasing water rather than issuing new water right permits is a departure from past practice. As noted above, it appears likely that water for new permits is not legally available in the Clark Fork basin except for a brief 22-day period during 3 years out of 10 when Avista's hydropower rights are filled. A lease would differ from a new water right in three important respects. First, a water right is granted in perpetuity, so long as the conditions of the right are met. A lease would exist for a definite period up to 50 years and may be renewed once.[10] Second, except for the permitting fee, water rights are free, whereas a lease implies a payment for the amount of water leased. Third, and perhaps most important, a lease entitles the lessor to "wet" water. A water right does not guarantee water delivery; instead, it entitles the holder to a place in line for allocation of the existing supply. A new water right would have a priority date junior to all other rights in the basin, and thus may provide little if any assurance of actual water availability. A lease, on the other hand, would require the state to deliver water in return for a specific payment. Thus by contracting for water stored Hungry Horse, the state could provide new users with actual water rather the most junior right valid only during 22 days wet years.

Although the BOR has claimed a right to market up to 3.5 million acre feet at Hungry Horse, no contracts have been issued for Hungry Horse water. The operation of this project is subject to constraints arising from other project purposes, including flood control and hydropower generation. It is also subject to a biological opinion issued by the National Marine Fisheries Service as a result of the listing of Columbia Basin anadromous fish stocks pursuant to the Endangered Species Act. The fish and other constraints may limit the availability of water for contracts for consumptive uses. In addition, BOR has not determined the price it would charge for Hungry Horse water. Given this uncertainty, the Task Force successfully sought a resolution of the 2005 legislature urging the DNRC to "...enter into negotiations with the (BOR) to determine the availability and cost of water stored behind Hungry Horse Dam for which the State of Montana might contract to support existing water use and future water development in the Clark Fork River basin." The DNRC recently began discussions with the BOR aimed at securing a contract.

Hungry Horse and the Security of Existing Basin Water Rights

In addition to providing for new water rights, the state could lease Hungry Horse contract water to basin users with a right junior to Avista's Noxon Rapids or PPL Montana's Kerr or Thompson Falls rights. If the situation arose when either of the utilities would issue a water rights call on junior users, leased water could be released from Hungry Horse in an amount sufficient to replace the amount the junior users subject to the call would consume, eliminating the need for the call. Providing this security would require, in addition to the lease, a water management system that could follow the water released from Hungry Horse down river to the Avista and/or PPL Montana dams. Through discussions with BOR staff, the Task Force has determined that modeling tools exist that would allow the scheduling of Hungry Horse releases, although they would have to calibrated for the Clark Fork basin. Through this management system, junior users throughout the basin could be protected against calls by Avista or PPL Montana, not just juniors in the path of water released from Hungry Horse. For example, the owners of Willow Creek Dam in the Flint Creek watershed have water rights junior to Avista's. Any time its water rights are not filled, Avista could issue a call to stop the filling of Willow Creek Dam. If the Willow Creek owners leased Hungry Horse contract water from the state, they could mitigate such a call by causing Hungry Horse water to be released in amounts sufficient to compensate for the Willow Creek water they are storing behind their dam.

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[10] See 85-2-141(5) MCA.

Implications for Tribal Water Rights

The Confederated Salish and Kootenai Tribes (Tribes) have taken the position that they have two types of water rights. The first is reserved rights tied to the purpose of their reservation which was to provide a tribal homeland. The priority date of the reserved rights is July 16, 1855, the date of the Hell Gate Treaty that created the reservation. The second type of water rights is pre-treaty aboriginal rights. The aboriginal rights are claimed as non-consumptive rights both on and off of the reservation tied to hunting, fishing, pasturage, and timber. The Tribes and the Montana Reserved Water Rights Compact Commission are currently in negotiations to quantify these rights. In the negotiations, the Tribes are also claiming ownership of all waters that arise on or under or flow through their reservation. The Compact Commission has not accepted this ownership position which conflicts with Montana's Constitution. Leaving aside the ownership issue, a state contract with BOR for Hungry Horse water and subsequent leases by the state to Clark Fork basin water users could not affect Tribal water rights. With or without the aboriginal rights, the Tribes have the most senior water right in the Clark Fork Basin. Their rights are senior to the BOR rights at Hungry Horse. During periods when their rights are not filled, the Tribes could make call on BOR to stop the filling the Hungry Horse reservoir. However, once water is stored in Hungry Horse, Tribal rights would not prevent BOR from issuing a contract to the state for the stored water, nor would they prevent the state from leasing the contract water to basin water users. Water stored in Hungry Horse and contracted to the state may, in fact, play a role in the compact negotiations. The compact could allocate some or all of the contract water to the Tribes for marketing to basin water users. To repeat, under Montana water law, a state contract for water stored in Hungry Horse reservoir and subsequently leased to basin water users could not and would not harm Tribal water rights.

Action Needed to Secure Hungry Horse Water for the Clark Fork Basin

As stated above, before the state can contract for Hungry Horse water, BOR must determine the amount and price of the stored water available for contracting. In a September 25, 2006 meeting with DNRC Director Mary Sexton and DNRC staff, BOR Pacific Northwest Region Director Bill MacDonald stated that he did not see contracting with the state as a problem, but the "devil will be in the details." Those details include conducting a new allocation of the remaining $12 million of Hungry Horse project costs among the purposes served by the project and then conducting an environmental impact statement on a proposed contract. Currently project costs are allocated only to flood control (30%) and hydropower production (70%).[11] The state contract would presumably include irrigation and municipal and industrial uses to which costs could be allocated.[12] Director MacDonald provided an initial rough estimate that completing a contract would require 2 to 3 years and $2 to 3 million. The state, as the contracting entity, would be obligated to pay these costs on an up front basis as they are about to occur. The actual time and cost required would, of course, depend on the amount of water in the contract. The state has not yet decided whether or how much to water to request. State law currently limits the total amount of water that the state may lease for all beneficial uses to 50,000 acre/ft.[13] BOR does not have a statutory limit in the amount of water it can market. All water contracted from BOR does not have to be allocated in any given year. Should the state contract for more than 50,000 acre/ft, it would effectively reserve that amount of water for use in Montana's Clark Fork basin against future uses in downstream states. The State of Washington has enacted a statute allowing it to divert up to an additional 1 million acre/ft of water from the

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[11] Flood control costs are born by the US taxpayer. Flood control beneficiaries, therefore do not directly repay project costs. Only the 70% born by hydropower production is currently being repaid.

[12] In a cost allocation, irrigation assumes only that portion of the project costs that it can afford to pay according to a BOR analysis.

[13] See 85-20141(4) MCA.

Columbia River. While such an allocation may not come directly from Hungry Horse reservoir, it would likely impact the operation of the system of dams in the Columbia River, including both Hungry Horse and Libby reservoirs in Montana.[14] Other downstream states may also act to divert additional Columbia basin water. The Columbia basin states do not have an equitable apportionment of Columbia water, an interstate compact, or other vehicle for coordinating Columbia water allocations. Only by contracting for Hungry Horse water can Montana reserve its use for its water users.

To proceed with contracting, the state must make a request for a specific amount of water and pay for at least the new cost allocation. Since the DNRC does not now have funds for the cost allocation and/or the environmental impact statement, these funds would have to be requested of the 2007 legislature. DNRC is currently deciding how much to request and whether to proceed only with the cost allocation or the full process including the environmental impact statement at this time. When it decides, the department will write to the BOR asking for the timeline and costs for the action it requests.

Conclusion

No water is legally reserved for future water use in the Clark Fork River basin. Lower basin hydropower rights likely mean that no more water is legally available in the basin for new surface water rights and groundwater rights connected to surface water. This implication is supported by a recent proposed permit decision by a DNRC hearings examiner. Water now claimed by BOR in its water right filing for storage in Hungry Horse reservoir could provide for new basin water development and to protect water uses based on water rights junior to the hydropower rights. In response to House Joint Resolution 3 adopted by the 2005 legislature, DNRC has begun discussions with BOR to determine the amount and price of Hungry Horse water available for which the state might contract. Such a contract is the only way to reserve for Montana's Clark Fork basin water users. The state could lease contracted Hungry Horse water to provide for new water uses and to increase the security of water uses based on water rights junior to the lower basin hydropower rights. In light of pending competition for Columbia basin water by downstream states, DNRC needs to move promptly to determine an amount of water for which it might contract and the costs of that contracting process so that it can request the needed funds from the 2007 legislature and begin the contracting process.

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[14]The three significant storage reservoirs in the Columbia River system in the US are Lake Roosevelt created by Grand Coulee Dam, Lake Koocanusa created by Libby Dam, and Hungry Horse reservoir. Any significant additional diversion and consumption of Columbia River water may, therefore, affect the operation of one of all of these dams and the amount and timing of their water storage.

Appendix 4
Clark Fork River Basin Task Force
2007-2008 Budget Requests

Request

The Clark Fork River Basin Task Force (Task Force) requests a total of $90,000 for the biennium, or $45,000 per year. This funding would allow the Task Force to continue to carry out its mandate set out at 85-2-350 MCA and discussed below. The annual budget request breakdown is as follows:

Facilitator Costs (salary and expenses) -	$20,000
Task Force Costs (meeting costs & member mileage) -	$5,000
Project Costs (printing, etc.) -	$5,000
Communication/Outreach (quarterly newsletter, etc.) -	$5,000
Conference -	$10,000
Total -	$45,000

Background

The Task Force was created in 2001 pursuant to 85-2-350 MCA. Its members are chosen by the DRNC Director to ensure balanced geographic and water interest representation of the Clark Fork River basin. A list of the current members is attached. In September 2004, the Task Force adopted the *Clark Fork Basin Watershed Management Plan (Plan)*, which addressed the protection of existing water rights and the future development and conservation of basin water. Most of the *Plan's* recommendations were adopted into the State Water Plan. Two key issues identified in the *Plan* include the constraints imposed by lower basin hydropower rights on both future water development and existing uses based on water rights junior to the hydropower rights, and the increasing importance of groundwater for future water development. The *Plan* found that more information is needed about basin groundwater. In response to the first issue, the Task Force won approval in the 2005 legislature of HJR3 which directed the DNRC to negotiate with the Bureau of Reclamation concerning the amount and cost of water stored in Hungry Horse Reservoir that the state might obtain through a contract to support existing and future basin water uses. These negotiations have just begun. Concerning the second issue, the Task Force convened two groundwater conferences in the fall of 2006, one focused on technical concerns and one on policy concerns.

Task Force Benefits

As just stated, the Task Force has provided the means for a balanced group of basin water interests to make important contributions to addressing basin water issues and management. The Task Force is the only group addressing water quantity issues for the Clark Fork River Basin as a whole. The ultimate value of the 2004 *Plan* will depend on its implementation. The Task Force has been and will continue to be the driving force behind that implementation. Important basin water issues remain. Unlike other basins in the state, no provision has been made in the Clark Fork for reserving water for future use. Hungry Horse water is therefore a critical resource for the basin and completing the negotiations with the BOR is vital. The Task Force is needed to motivate the negotiations and provide basin water interest input to them. Basin water management is changing in response to the recent TU vs. DNRC Supreme Court decision, the ongoing water right adjudication, and the recent acknowledgment by a DNRC hearing examiner's of the lower basin hydropower water rights on the legal availability of water for new water rights. Practical means for integrating groundwater into the "first-in-time, first-in-right" water rights system of water administration and for accommodating surface and groundwater interactions must be found. Growth related water development challenges, including subdivision regulation, must be faced. In particular, the coordination between subdivision regulation and water right administration should be examined. With the requested funding over the next biennium, the Task Force can continue making important contribution to these and other issues.

Appendix B
Groundwater Policy Conference Agenda and Attendance List

Managing Clark Fork River Basin Ground Water
Preliminary Policy Conference Agenda
November 9, 2006

I. 7:30 AM, Registration

II. 8:15 AM, Welcome
Gerald Mueller will welcome participants, introduce the Task Force, and set out the conference goals and agenda.

III. 8:30 AM, Clark Fork Basin Economic and Demographic Trends
Dr. Larry Swanson, Center for the Rocky Mountain West, will overview present and projected future Clark Fork basin population levels and economic trends.

IV. 9:30 AM, Impacts of the Growing Reliance on Groundwater Pumping
Robert Glennon Morris K. Udall Professor of Law and Public Policy.

V. 10:30 AM, Break

VI. 10:45 AM, Water Supply Assessment
The first of three panels will address present and future water supply issues/problems.
Panel 1- Tribal and local government elected officials will answer the following questions:
- What water supply problems are you currently experiencing?
- What water supply problems do you foresee over the next 50 years?
- How are you addressing these problems?

VI. Noon, Lunch
Luncheon Speaker – Hal Harper, Governor Schweitzer's Chief Policy Advisor.

VII. 1:00 PM, Water Supply Assessment Continued
Panel 2 - Tribal and local government planners will address the following questions:
- What planning activities are underway to meet future water demands?
- What are your current and projected water supply needs?
- What planning and management issues do you face?
- What tools do you need to address them?

VIII. 2:00 PM, Break

IX. 2:15 PM, Water Supply Assessment Continued
Panel 3 - Water users/interests will address the following questions
- What water supply problems are you currently experiencing?
- What water supply challenge do you foresee over the next 50 years?
- How are you addressing them, or what should be done to address them?

IX. 3:30 PM, Break.

X. 3:45 PM, Policy and Administrative Tools
Dr. David Shively and Mike McLane will address policy and administrative tools for allocating ground water while protecting surface water conditions (i.e. augmentation, ground water storage, water banking, water trades etc.)

XI. 5:00 PM, Adjourn.

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Briana Randall		Montana Water Trust	
Barbara Hall		**Montana Water Trust**	
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BOM&G 2			
Bailey Iott		UM Department of Geography	
Hal Harper		Office of the Governor, State of Montana	
Robert Glennon		University of Arizona	
Randy Ingram		**Mayor, City of Polson**	
Gail Jones		**Chair, Powell County Commission**	
Elna Darrow		**Flathead Basin Commission**	
Bill Slack		Flathead Irrigation District Joint Board of Control	
Mark Spratt		RLK Hydro & Flathead Conservation District	
Will Harmon		UM Public Policy Research Institute	
Verdell Jackson		Representative, House District 6	
Joey Jane		Representative, House District 15	
Jim Shockley		**Senator, Senate District 45**	
Richard Erb		Flathead Irrigation Board	
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Joe Meek		MT DEQ	
Harold Hoem			
John Kilpatrick			
William Craig			
Matt Gough			
Adam Perine			
Elaine Hawk		OPG	
Caryn Miske			

Not Attending